



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Jules Olita et al. : January 10, 2007
Serial No.: 10/034,428 : Art Unit 2621
Filed: December 27, 2001 : Examiner: Heather Rae Jones
For: HELMET-MOUNTED THERMAL IMAGING SYSTEM

Commissioner for Patents
Mail Stop Amendment
PO BOX 1450
Alexandria, VA 22313-1450

DECLARATION UNDER 37 C.F.R. § 1.131

To The Commissioner:

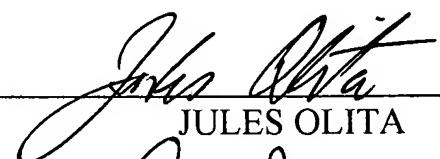
JULES OLITA, OWEN MEDD and WESLEY SHERIDAN, declare and state the following:

1. That we are the joint inventors of the subject invention described and claimed in the above-identified patent application;
2. That at all times material hereto, we worked in the employ of Sage Technologies, Ltd. ("Sage"), the assignee of all rights, title and interest to the subject invention and of the above-identified patent application;
3. That prior to June 14, 2001, the effective date of the Del Bianco et al. reference (EP 1 107 041 A1) currently applied as prior art to reject Claims 1, 2, 7 and 8 under 35 U.S.C. 102(a) and Claims 3, 5, 9 and 11 under 35 U.S.C. 103(a), we conceived the invention as claimed in said application in this country and further reduced said invention to writing

in this country, as evidenced in drawings attached hereto as Exhibits A1 and A2, which drawings were prepared and completed at our direction and control prior to said effective date of the Del Bianco et al. reference;

4. That on June 13, 2001, prior to the effective date of the Del Bianco reference, at a meeting at Sage offices, we presented a design model of the invention to Patent Counsel, Armand M. Vozzo, Jr., Esquire, U.S. Patent Reg. No. 28,918, for docketing and patent consideration;
5. That from mid-June to mid-September 2001, we completed design specifications, and production and assembly drawings of the subject invention, as evidenced in the attached Exhibits B1-B5, all of such work activity being done in this country.
6. That during August and September 2001, we procured major design components of the invention, including the required infrared camera, its design housing and visual display, and completed fabrication and production of a working prototype of the invention, as evidenced in the attached Exhibits C1-C5, with all of such work activity being done in this country;
7. That on September 25, 2001, we presented and successfully demonstrated a working prototype of the invention at the Redmond Symposium of the International Association of Fire Fighters (IAFF) meeting in Phoenix, Arizona, evidenced by the attached Exhibit D1 representing a photograph of the invention used in a slide presentation associated with the demonstration.
8. That based upon our submission of the final design specifications and the production and assembly drawings of the working prototype to said Patent Counsel, the above-identified patent application was completed and filed on December 27, 2001.

We further declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true, and that all statements are made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful statements may jeopardize the validity of the application or any patent issuing thereon.

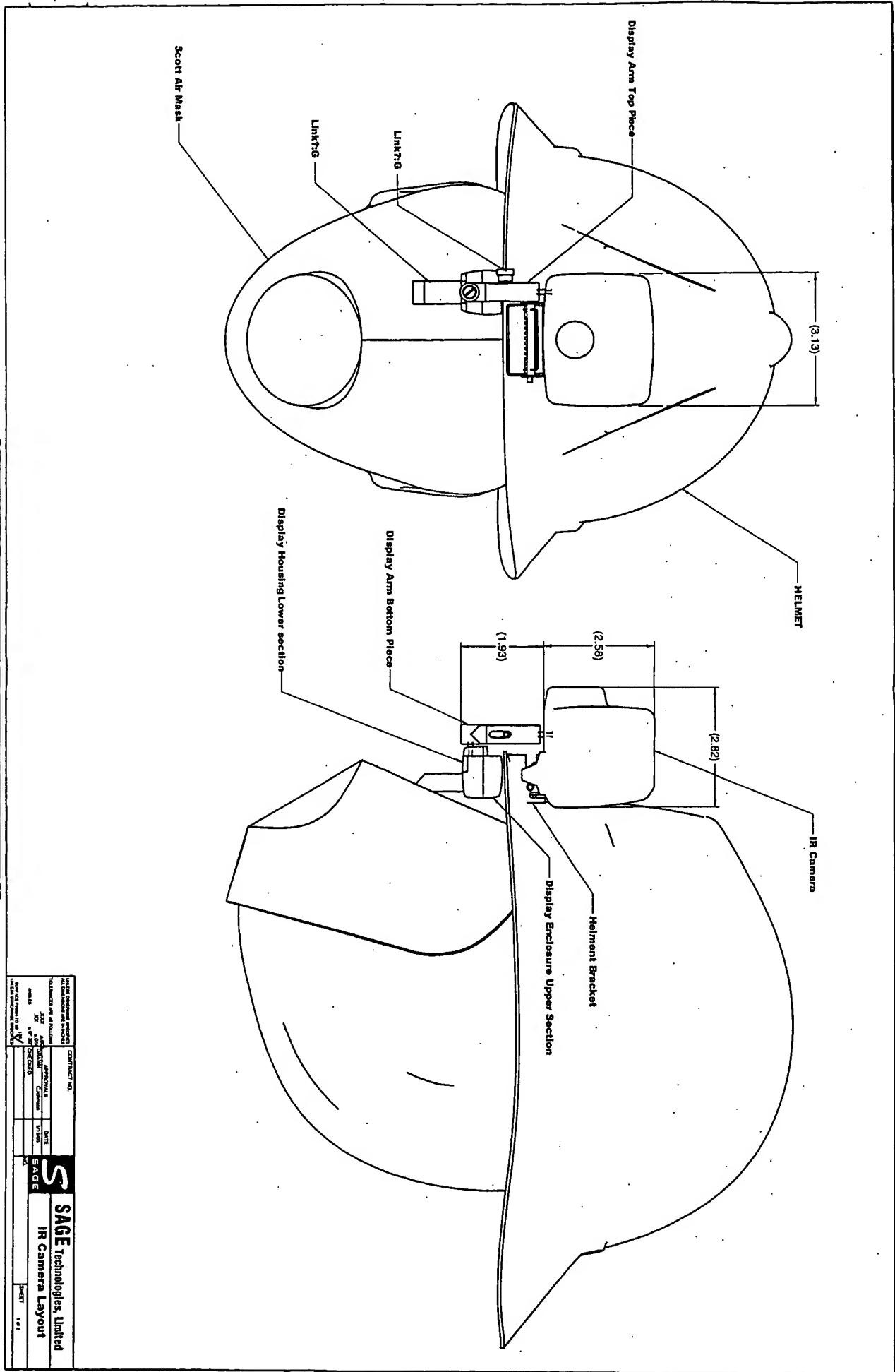
	<u>1-10-07</u>
JULES OLITA	Date
	<u>1/10/07</u>
OWEN MEDD	Date
	<u>1/10/2007</u>
WESLEY SHERIDAN	Date

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Mail Stop Amendment, PO BOX 1450, Alexandria, VA 22313-1450, on January 12, 2007.

Date: 1-12-07


ARMAND M. VOZZO, JR., ESQUIRE
Attorney of Record



ITEM	DESCRIPTION	REFERENCE NO.
1	IR Camera	IR Camera
2	Display Enclosure	Display Enclosure
3	Display Housing	Display Housing
4	Display Arm	Display Arm
5	Link7G	Link7G
6	Scott Air Mask	Scott Air Mask
7	Helmet	Helmet
8	Helmet Bracket	Helmet Bracket

SAGE technologies, limited

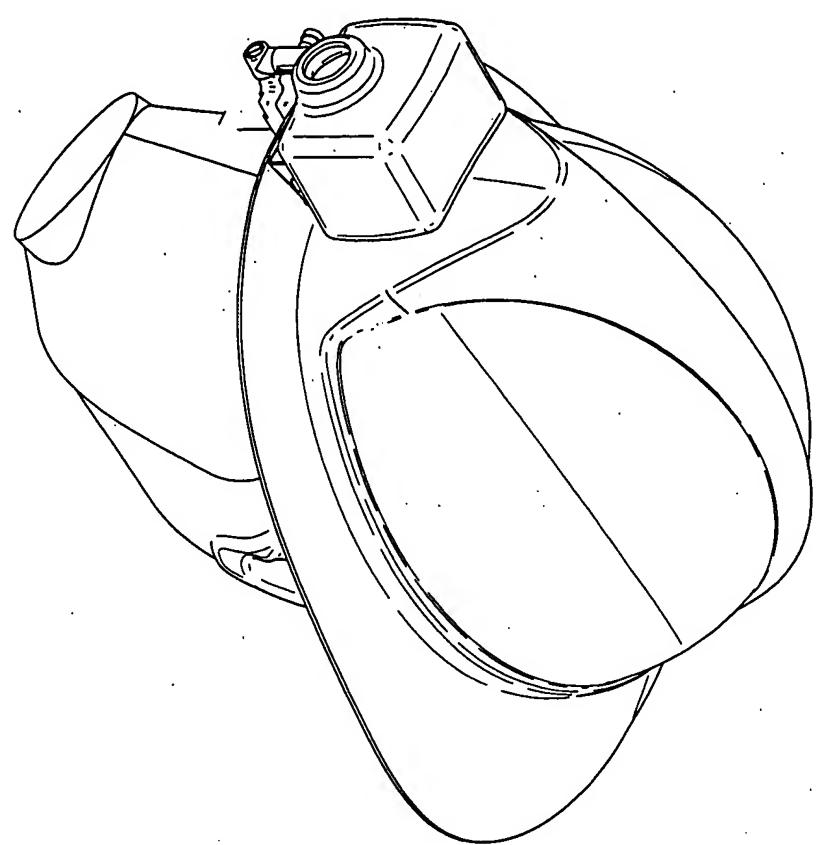
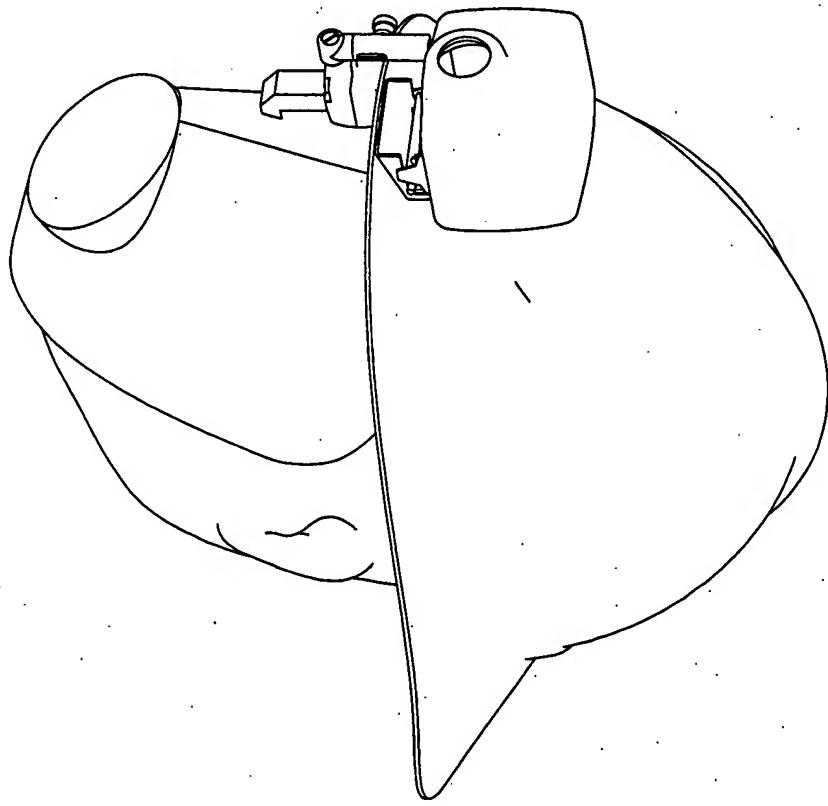
IR Camera Layout

1 of 2

EXHIBIT A1

EXHIBIT A2

NAME OF DRAWING PROJECT	CONTRACT NO.	SAGE Technologies, Limited	
INSTRUMENTS OR APPARATUS	APPROVALS	DATE	
models	APPROVED	1987	
XX	BY	SAGE	
IR Camera	checked	IR Camera Layout	
Actual Drawing No. 1	1	Scale 1:1	
Actual Drawing No. 2			



Item Number	Document Number	Title	Material	Quantity
1	20011	IR enclosure rear	TBD	1
2		VIRTUAL VISION LINE LOCK MOUNT	TBD	1
3	2001	THERMAL CAMERA 2001	N/A	1
4	UGM	UGM Q-SLIM BATTERY	N/A	1
5	20013	Virtual Vision PCB	N/A	1
6	20014	Bottom Case	TBD	1
7		PC board for camera	N/A	1
8	20010	IR enclosure front	TBD	1
9	CAT. NO. 2019	Snup On contact	Nickel Spring Steel	2
10	20012	Including Bracket	SHEET. 2024 GAUGE 0.040 3" THK	1
11	DZUS PIN	RETAINER, #4 TURN PRESS	brass	1
12	3132	groove pin	SS	1
13	X	groove pin	SS	1
14	DZUS PIN	STUD RETAINER SIZE 4	SS	1
15	SR455	HEX SOCKET BUTTON HEAD, NC 6	0	3
16	X	Hex Socket Button Head, NC 6	0	3
17	90825A721	Phillips Pan Head Machine Screw, NC 6	0	3
18	90825A614	Phillips Pan Head Machine Screw, NC 4	0	2
19	9A02-L1-HD	Switch	N/A	1
20	Metric	Slotted Pan Head M2 x 04	0	3
21	20016	Enclosure Seal	SILICONE SPONGE BLACK, 032 THK	1

Item Number	Document Number	Title	Material	Quantity
11	20007	BRACKET, C-SLOT	SHEET, AL. 2024, 20 GAUGE (0.032 THK)	1
12	20019	PEM block NO. 4	aluminum	1
13		Threaded Block Seal	SILICONE SPONGE, BLACK, 032 THK	1
14	20017	2mm machine screw, NC 6-32, 25.4 mm	SS	3
15	20011	4.5 mm X 5 mm ROUND SPACERS 2.5 mm HOLE	aluminum	3
16	20016	1.0-10 KAF Electronics		1
17	20017	Phillips Pan Head Machine Screw, NC 4	0	4
18	20015	BATTERY DOOR SEAL	SILICONE SPONGE, BLACK, 032 THK	1
19	20018	PCB Bracket	stainless	1
20	S-632-2-1	PCB RETAINER	stainless	1
21	20016	Phillips Pan Head Machine Screw, NC 6	0	1

EXHIBIT B1

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SAGE Technologies, Limited

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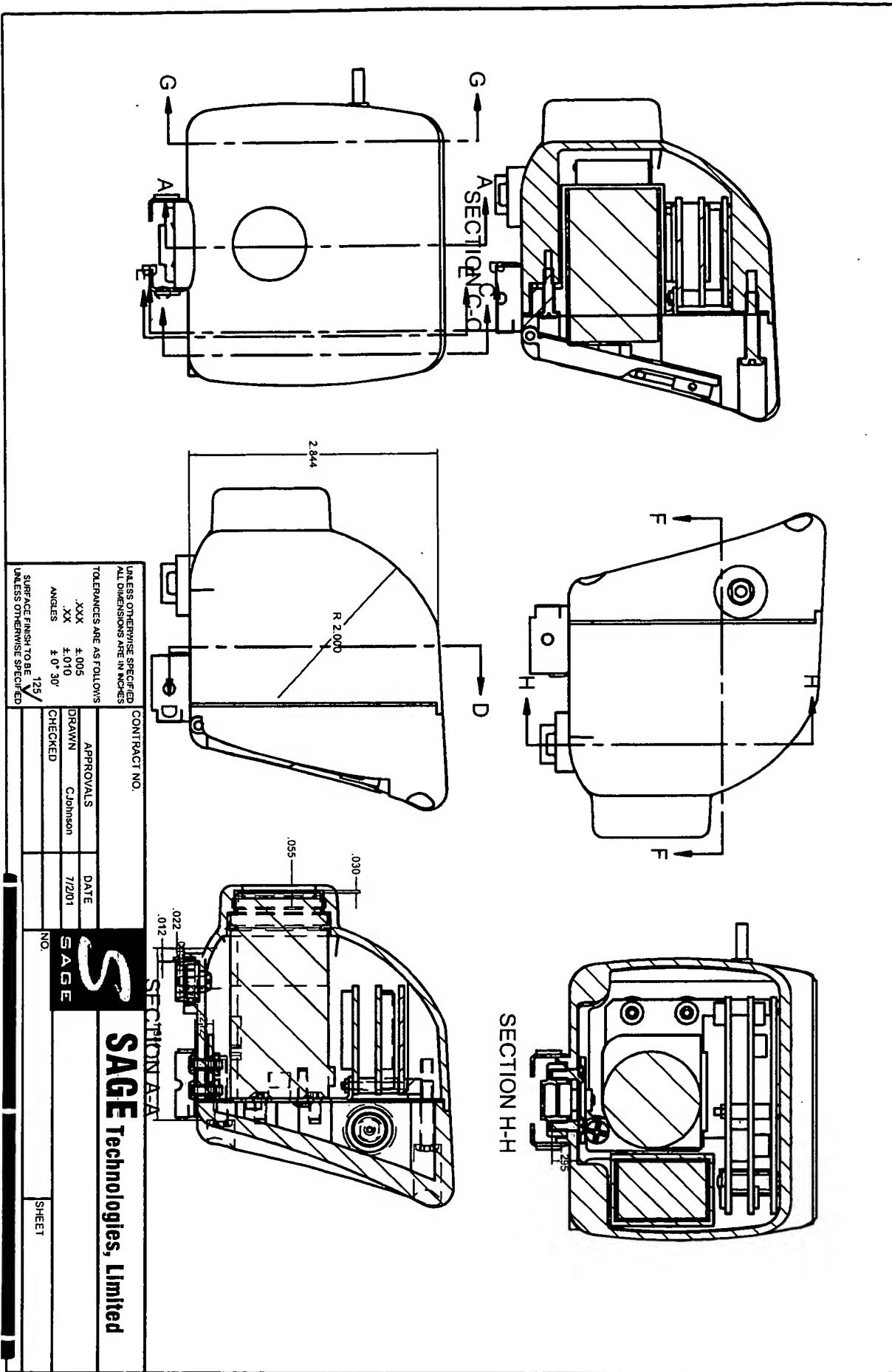
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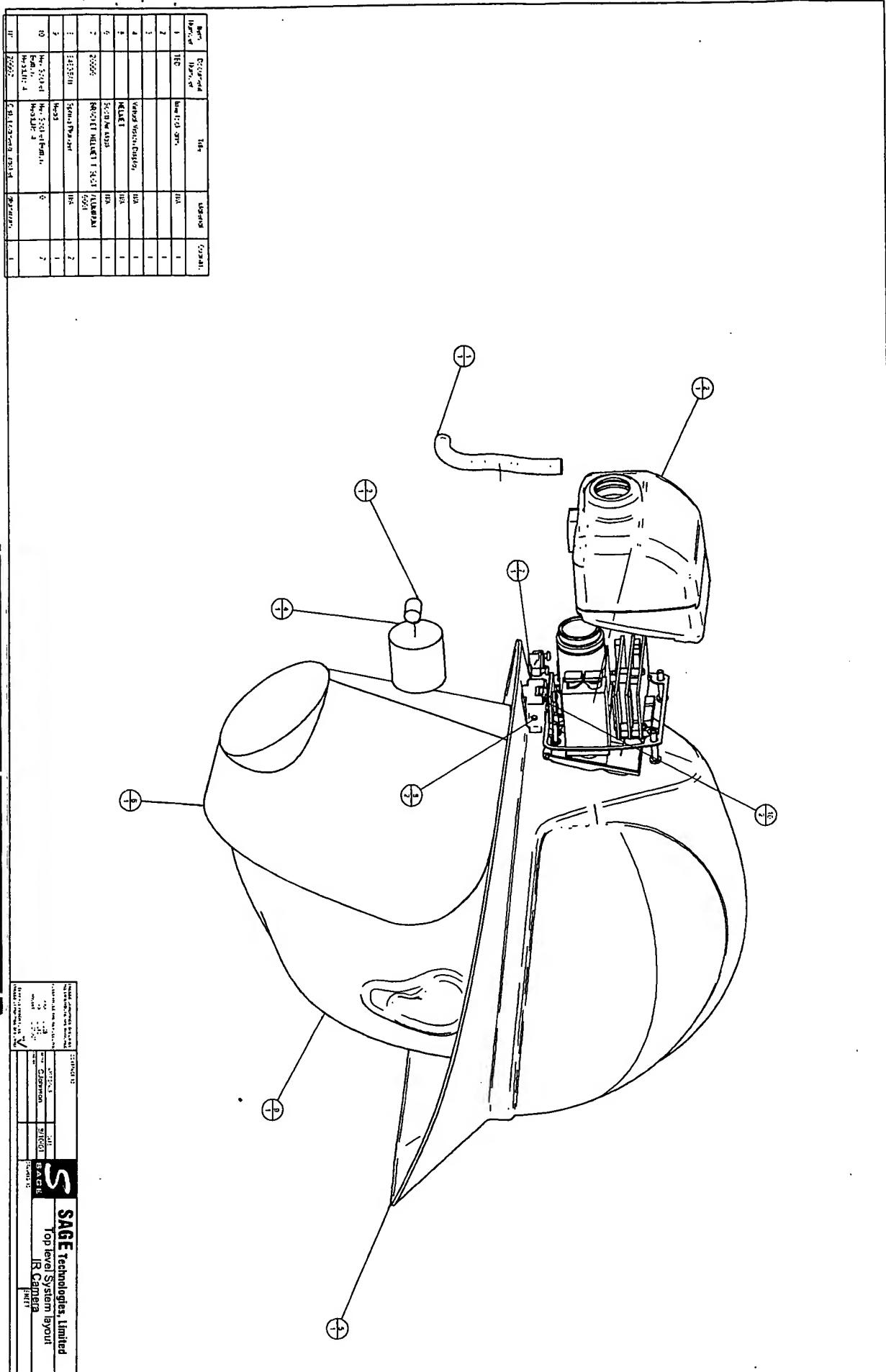
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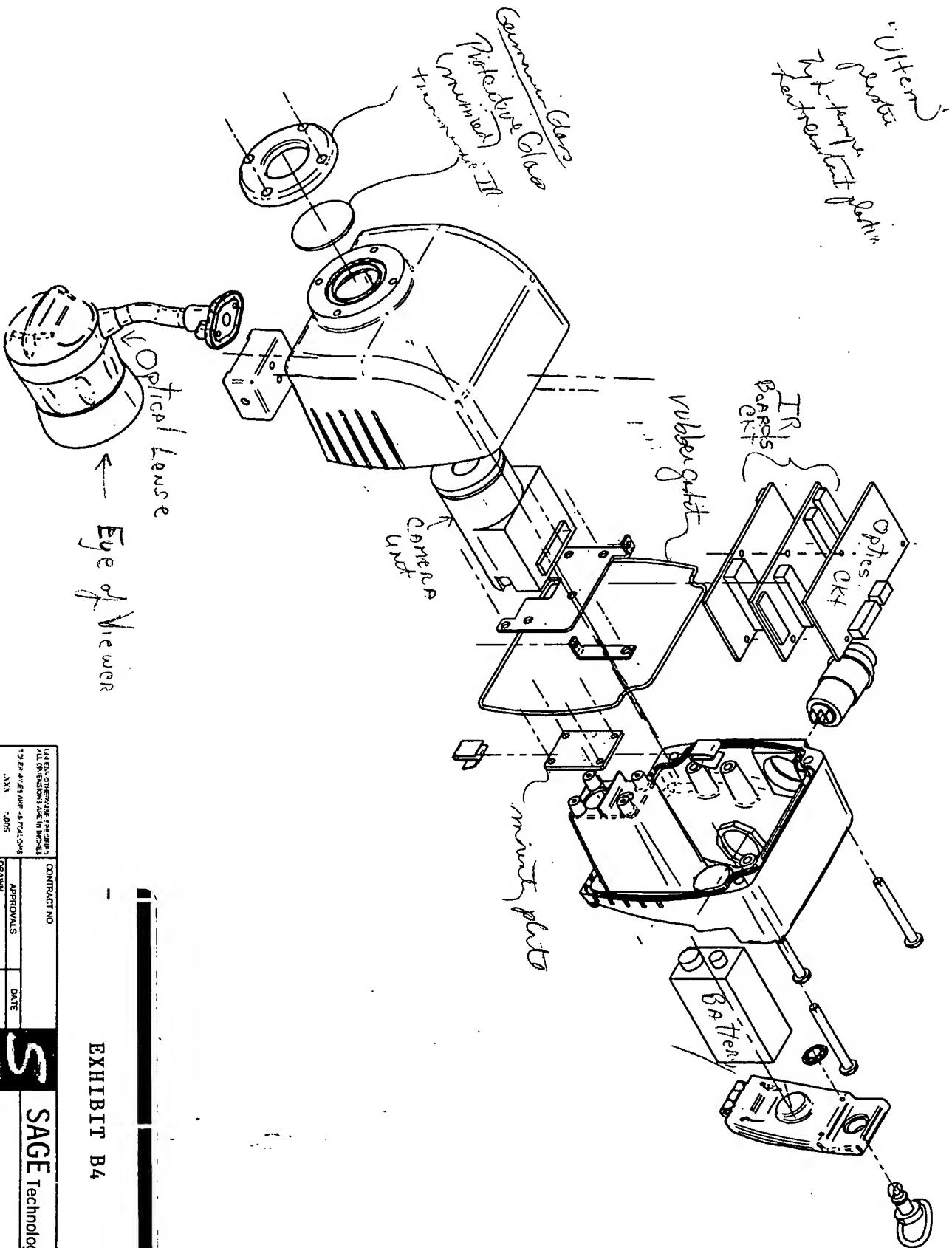
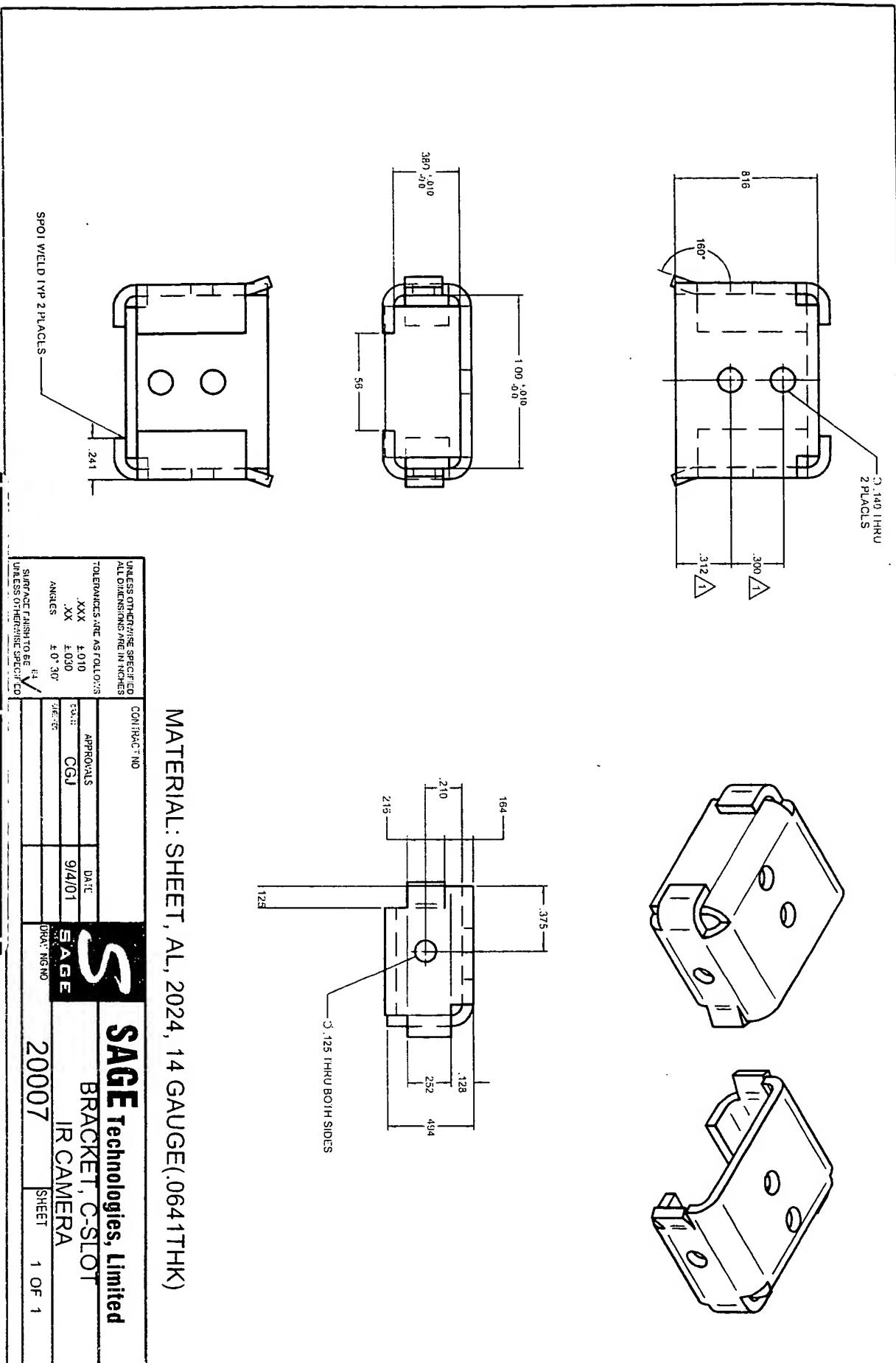


EXHIBIT B4

144 EA. OTHERWISE PROVIDED ALL UNQUOTEED ARE IN HOURS		CONTRACT NO.	
2000 APR 04 2004		SAGE Technologies, Limited	
APPROVALS		DATE	
DRAWN		2005	
APR 13		2005	
SHEET 125 OF 125		NO	
SHEET			



MATERIAL: SHEET, AL, 2024, 14 GAUGE(.0641THK)

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES		CONTRACT NO	
TOLERANCES ARE AS FOLLOWS			
XXX	APPROVALS	DATE	SAGE
±0.010		9/4/01	BRACKET, C-SLOT
±.010	CGJ		IR CAMERA
± 0° - 30°			
ANGLES		DRAWING NO	
SURFACE FINISH TO BE		20007	SHEET 1 OF 1
UNLESS OTHERWISE SPECIFIED			

**RAYTHEON SYSTEMS
PACKING SHEET**

S/C BUILDING
13532 NORTH CENTRAL EXPWAY
DALLAS, TX 75243

1. RAYTHEON PURCHASE ORDER NO.

2. PACKING SHEET

TX1-P16545



3. CUSTOMER P. O. NO.

4. DATE PREPARED

01NOV07

5. SLR# / IDR#

6. RR#

7.

PAGE 1 OF 1

8. SHIP TO
SAGE TECHNOLOGIES, LTD
SUITE 502
2500 MARYLAND ROAD
WILLOW GROVE, PA 19090

9. CONTRACT NO. 1247	10. SALES ORDER NO. T385410	11. GLA / CA NO. LR4P-	12. BREAKDOWN	13. DATE SHIPPED 01AUG24
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14. ROUTING AIRBORNE	15. GROSS WT.	16. AMOUNT AND TYPE CONTAINER	17. BILL OF LADING 3785705641
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18. ITEM	19. DRAWING OR PART NO.	20. DESCRIPTION	21. QTY	22. UNIT PRICE	23. AMOUNT
0001	N/A	2001AS CAMERA EA CAMERA INCLUDES 2 CCA'S, 1 DETECTOR(160X120),OPTICS HSING PACK/SHIP BY PROJECT 8/24/01	2 EA		
TOTAL: ACTUAL SHIP DATE: 08/24/01					

25. TOTAL CUBE	26. TYPE OF TRANSACTION SALES	27. SHIPMENT AUTHORIZED BY SCCDC 972-344-3746	DEPT. 2N26C2	BLDG/MS SC /32
28. PLANT CLEARANCE APPROVED BY M GIACOMA	24. BOX NO.	30. RSC INSPECTION	31. CUSTOMER INSPECTION	
29. PACKAGED BY [N/A]	P16545			
32. OWNERSHIP				

DELAWARE VALLEY INDUSTRIAL RESOURCE CENTER



An Affiliate of the **NIST** Manufacturing Extension Partnership

INVOICE

CK
WNL 9/19/2001

Sage Technologies LTD.
2500 Maryland Road
Suite 502
Willow Grove, PA 19090

INVOICE NO: 14379

Attention: Julius Olita

DATE: 8/30/01

Salesperson: _____ Date P.O. Number: _____ Date Shipped: _____ FOB: _____ Terms: _____

Quantity	Description of Service	Unit Price	Amount
	Project # 9952068		
	New Housing Design		
	For Engineering and Design Support		
	For Material	\$ 7,210.00	\$ 7,210.00
		SUBTOTAL	\$ 7,210.00
		SALES TAX	
		SHIPPING	
		TOTAL DUE	\$ 7,210.00

MAKE CHECKS PAYABLE TO:
Delaware Valley Industrial Resource Center

PLEASE INCLUDE THE INVOICE NUMBER ON YOUR REMITTANCE

Invoice No. 14378



EXHIBIT C2

Strengthening The Region's Industrial Base For The Future
2905 Southampton Road • Philadelphia, PA 19154-1270
215.464.8550 • FAX: 215.464.8570 • <http://www.maydavis.org>



Virtual Vision

Virtual Vision, Inc.
7659 178th Place Northeast
Redmond, WA 98052
phone 206. 882.7878
fax 206. 882.7373

Invoice No: 0100038
Invoice Date: 08/20/01

INVOICE

Customer No: SAG0500
Customer Ph: 215/658-0500
Customer Contact: Owen Medd

OK. you

Bill To: Sage Technologies, Ltd., Suite 502, 2500 Maryland Road, Willow Grove, PA 19090 Ship To: Same

Terms: Net 30 Project Manager: D. Soward
Order #: PO # 1264

# Ordered	# Shipped This Invoice	Total Shipped on PO	Item	Unit Price	Extended Price
12	2	2	Version 4 Interim Fire Fighter Helmet Display System	NRE Development Cost	Prototype units

Sales Total: [REDACTED]
Sales Tax: 0.00
Shipping & Handling: 0.00
Other Charges: 0.00

Invoice Total:

Please make checks payable to Virtual Vision, Inc.

SAGE TECHNOLOGIES, LTD

MONTHLY PROGRESS REPORT AUGUST 2001

CONTRACT NO.: 4400026685

DATE: September 5, 2001

To: Science Application International Corporation
Attn: Jessica Dillon
P.O. Box 492
Ft. Belvoir, VA 22060

From: Sage Technologies, Ltd.
2500 Maryland Road
Suite 502
Willow Grove, PA 19090

Report Period of Performance:

1 August 2001 through 31 August 2001

1. TASK AREAS

2. TRAVEL ACTIVITY

- 8/18-8/21 – meeting with Virtual Vision to review, accept and integrate OLED display for helmet mounted system.
- 8/23-8/26 – attend and participate in the Fire Rescue International Conference.

3. POTENTIAL/PROBLEM AREAS

- Availability of the Raytheon cameras in the helmet mount configuration continues to be a concern. At issue is the delivery of the updated printed circuit boards that are still anticipated the end of September.
- A continuation of the unknown status of FY02 plus up-constrained [redacted] [redacted] [redacted]

4. MATERIAL PURCHASES

Ongoing:

Flight Test Support for the Helmet Mounted TI System

[redacted] [redacted] [redacted] [redacted] [redacted] [redacted]

DVIRC design and modeling support for the Helmet Mounted TI System.

[redacted] [redacted] [redacted] [redacted] [redacted] [redacted]

New:

Raytheon contract to provide prototype TIC(20)

SAGE TECHNOLOGIES, LTD

MONTHLY PROGRESS REPORT
SEPTEMBER 2001

CONTRACT NO.: 4400026685

DATE: October 2, 2001

To: Science Application International Corporation
Attn: Jessica Dillon
P.O. Box 492
Ft. Belvoir, VA 22060

From: Sage Technologies, Ltd.
2500 Maryland Road
Suite 502
Willow Grove, PA 19090

Report Period of Performance:

1 September 2001 through 30 September 2001

1. TASK AREAS

- Completed fabrication of two Helmet Mounted Thermal Imaging Systems. Systems being used for presentation/demonstration, and initial T&E purposes.
- Received additional TIC's from Raytheon the end of the month with updated PCB's. Also received additional display units from Virtual Vision. Anticipate fabrication and assembly of deliverable unit to the Army by mid October.
- Received evaluation protective lenses for mounting in front of the TIC. Anticipate device selection during the next reporting period.
- [REDACTED]

2. TRAVEL ACTIVITY

- 9/22-9/25 - attend and participate in IAFF meeting in Phoenix, AZ. Present and demo Helmet Mounted Thermal Imaging System.

3. POTENTIAL/PROBLEM AREAS

- [REDACTED]

4. MATERIAL PURCHASES

Ongoing:

Virtual Vision contract to provide displays for Helmet Mounted TI System.

DVIRC design and modeling support for the Helmet Mounted TI System.

MLI Manufacturing contract to provide prototype TIU

Contract to provide prototype TIU